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| APPLICATION NO.                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/554,245                           | 07/28/2006  | Rolf Rospek          | 306.45490X00        | 6542             |
| 20457                                | 7590        | 03/30/2010           | EXAMINER            |                  |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP |             |                      | FIDEI, DAVID        |                  |
| 1300 NORTH SEVENTEENTH STREET        |             |                      |                     |                  |
| SUITE 1800                           |             |                      | ART UNIT            | PAPER NUMBER     |
| ARLINGTON, VA 22209-3873             |             |                      | 3728                |                  |
|                                      |             |                      |                     |                  |
|                                      |             |                      | MAIL DATE           | DELIVERY MODE    |
|                                      |             |                      | 03/30/2010          | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/554,245             | ROSPEK ET AL.       |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | DAVID T. FIDEI         | 3728                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 22 December 0209.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.  
 4a) Of the above claim(s) 1-7 and 19 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 8-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 1-7 and 19 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 6, 2009.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (US 5,005,694) in view of DE 32 26 744 (cited by Applicant). Davis et al discloses a packaging for transport of detonating cord. The detonating cord (55) is wound in a single plane as a flat spiral around the supporting posts (55, see figure 3). A base is defined by at least the separators (35, 85, 93). The difference between the claimed subject matter and Davis et al is that there is no

disclosure of X-ray examination of the detonating cord in its packaging. DE 32 26 744 teaches the examination of detonating cords by a radioactive source is well known (see form PCT/IPEA/409 made of record). Since an X-ray is a source of radiation, the language is broad enough to encompass the examination disclosed by DE 32 26 744. It would have been obvious to one of ordinary skill in the art to subject the package of Davis et al to X-ray examination as taught by DE 32 26 744 for the reason of determining whether or not the detonating cord has any flaws.

As to claim 10, shipping a package that has no flaws would have been within the level of ordinary skill to one versed in the art.

As to claims 9, 12 and 14-18, nothing is recited therein that further limits the method in a manipulative sense.

4. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen (US 4,817,787) in view of DE 32 26 744 (cited by Applicant). Owen discloses a packaging for transport of detonating cord. The detonating cord (33) is wound in a single plane as a flat spiral (defined by loop 35) on a base plate (25) made of pressed board. The difference between the claimed subject matter and Owen is that there is no disclosure of X-ray examination of the detonating cord in its packaging. DE 32 26 744 teaches the examination of detonating cords by a radioactive source is well known (see form PCT/IPEA/409 made of record). Since an X-ray is a source of radiation, the language is broad enough to encompass the examination disclosed by DE 32 26 744. It would have been obvious to one of ordinary skill in the art to subject the package of

Davis et al to X-ray examination as taught by DE 32 26 744 for the reason of determining whether or not the detonating cord has any flaws.

As to claim 10, shipping a package that has no flaws would have been within the level of ordinary skill to one versed in the art.

As to claims 11, 12 and 15-18 the type of cord, use in the oil and natural gas industry, individually spaced laps and the detonating cord sealed in a bag does not define any manipulative steps that distinguishes over the prior art.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owen (US 4,817,787) in view of DE 32 26 744 as applied to claim 9 above, and further in view of Gaston (US 5,007,230). To the extent that the space between the laps recited as produced by a spacing cord defines a method that distinguishes over Owen (US 4,817,787) in view of DE 32 26 744, Gaston discloses a packaging having spiral wound detonating cord (6) with spacing between the laps produced by a spacing cord (7, see figure 2). Also the last lap of the spiral is passed over the rest of the spiral (see figure 1, with part shown in phantom). To provide a detonating cord having a spiral configuration with having a spacing cord as taught by Gaston would have been obvious for the reason of providing a greater length of cord on the board.

#### ***Response to Arguments***

6. Applicant's arguments filed December 22, 2009 have been fully considered but they are not persuasive.

Applicant argues, page 8,

However, the Applicants disagree with the Examiner's characterization of the DE 32 26 744 reference. According to page 7 of the original German-language document, the paragraph which begins with the phrase "Gem~13 Figure 1 wird bei einer Vorrichtung zur Pr~Jfung" is translated as follows: "According to Figure 1, in order to test the filling density of a detonating cord, this cord 1 is unrolled from a feed drum or unwinding drum, specifically by means of a drive roller 4. The cord 1 is guided to a take-up and wind-up drum 3 by way of guide rollers 5, 6, 7 and tensioning rollers 8, 9. The cord 1 is guided past a radioactive source 10, which is situated in front of the cord. If a defect occurs, the sensor that consists of the ionization chamber 11 transmits a signal, and the device is turned off. Subsequently, the defective cord part is removed."

Therefore, according to this disclosure in the DE 32 26 744 reference, the detonating cord 1 is unrolled from a feed drum, guided past a radioactive source 10, and subsequently wound back up onto a wind-up drum 3, by way of guide rollers 5, 6, 7 and tensioning rollers 8, 9. This is shown in Figure 1 of the DE 32 26 744 reference.

It appears both Applicant and the Examiner agree nothing is provided in Davis et al, or Owen that expressly states their packages are subject to a radioactive source. A translated copy of DE 32 26 744 is provided herein for reference, however it appears DE 32 26 744 is concerned with a specific type of device or apparatus that is used for detonation cord examination. Note that claim 1 includes a sensor, ionization chamber and a marking mechanism is provided. Page 3 of DE 32 26 744 indicates that "With a known device for examination of fillingdense of the explosive filled into a detonation cord" a radioactive source is used. Hence, it appears exposing detonating cords to a radioactive source for examination was known in the art at least prior to July 1982, for approximately 30 years. It also appears the advantage of DE 32 26 744 is that the cord can be marked, cut and repaired immediately when a flaw is detected. As opposed to prior technologies where "working with a radioactive source does not require manual pulling of Schnur (cord/rope)". It respectfully appears somewhat myopic to only suggest that one skilled in the art would have failed to recognize that DE 32 26 744 suggests X-ray examination of detonation cords in any capacity beyond providing a feeding drum and unrolling the cord onto another

drum. One skilled in the art would have readily appreciated the DE 32 26 744 suggesting X-ray inspection of detonating cords prior to use. Quality control of mass merchandise prior to end use is practically unheard of. It is customary to sample, screen, test, monitor or otherwise examine mercantile goods. It is also pointed out X-ray examination of baggage, boxes, bottles, envelopes, purses, packages and shipping containers is well known, particularly where security is a concern. Namely, the postal service, private shipping companies, government offices, courts, air ports and other high security areas are but a few. In the present case X-ray examination of a detonation cord in its package is no more than a predictable use of prior art elements according to their established functions, see §103. *KSR International Co. v. Teleflex Inc.*, 82 USPQ 1385 (US 2007).

For at least these reasons, it is submitted there is a well founded *prima facie* holding of obviousness.

### ***Final Rejection***

7. Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c), see MPEP 706.07(a). In considering the remarks and/or amendments to the presently claimed subject matter, the examiner has thoroughly considered the issues while giving applicant a full and fair hearing.

Neither the statues nor the Rules of Practice confer any right on applicant to an extended prosecution. *Ex parte Hoogendam*, 1939 C.D. 3, 499 O.G.3 (MPEP 706.07).

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID T. FIDEI whose telephone number is (571)272-4553. The examiner can normally be reached on Monday - Friday 8:30 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571) 272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David T. Fidei/

Primary Examiner, Art Unit 3728